# SAGAR SANJAY SHAH

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#### **EDUCATION**

**George Washington University**Master of Science in Data Science

May 2026

St Francis Institute of Technology, Mumbai, India

Bachelor of Engineering in Information Technology with Distinction

June 2024 (GPA 3.2/4)

### **PROFESSIONAL EXPERIENCE**

## Tata BY Forage, Mumbai, India

July 2023 - August 2023

- Framed business scenarios and transformed data-driven insights into actionable strategies by building and maintaining Excel tools which streamlined data collection, analysis, and presentation, improving performance tracking and usability.
- Selected and created impactful visuals to communicate insights, leveraging advanced data visualization tools to convey complex information in a clear and compelling manner.
- Deployed statistical analyses and visualized large datasets to identify trends, patterns, and opportunities, enabling data-driven decision-making across business functions.
- Documented and standardized repeatable workflows, including web scraping methodologies, to ensure consistency, efficiency, and scalability in data management processes.
- Offered engaging presentations to stakeholders, translating technical analysis into practical insights to drive informed business strategies and decision-making.

#### Walmart BY Forage, Mumbai, India

August 2023 - August 2023

- Constructed, build, and maintained advanced simulation models using Autodesk software to emulate real-world software development processes, ensuring high accuracy and reliability in replicating workflows.
- Directed simulation analyses to identify bottlenecks and inefficiencies in software development workflows, proposing and implemented optimization strategies to refine performance and productivity.
- Collaborated with cross-functional teams to review project requirements and specifications, delivering tailored technological solutions that met or exceeded performance and quality benchmarks.
- Led team leveraging simulation-driven insights to streamline development processes, supporting data-driven decision-making and contributing to overall success of the project.

# **ACADEMIC PROJECTS**

# **Battery swapping system for Electric Vehicles**

- Engineered an innovative battery-swapping system designed to revolutionize electric vehicle charging by notably reducing wait times and enhancing user convenience.
- Optimize system's functionality and ensure seamless user experience, designing key components to enhance profitability.
- Utilized technologies such as a Battery Management System for monitoring battery health, sensors for real-time data collection, dynamic connectivity solutions for efficient communication between components, and the ESP8266 Wi-Fi module for remote access and monitoring.
- Demonstrated system's potential to accelerate electric vehicle adoption by offering a sustainable and user-friendly alternative to traditional charging stations.

# **Modernized Entry Systems with Contactless Door Solutions**

- Engineered a modernized entry system that eliminates the need for physical keys, improves security, and accessibility for users.
- Crafted and carried out a contactless solution utilizing IR sensors for detection, wireless communication modules for secure
  data transmission, and Arduino Uno as central controller for processing user interactions.
- Executed rigorous testing and quality assurance to assure system's reliability and resilience across varied environments.
- Performed a scalable and customizable access control solution, addressing real-world requirements for improved security and standardize access in residential and commercial settings.

### CERTIFICATIONS

- I achieved the Google Data Analytics course via Coursera, equipping myself with practical skills in data cleaning, visualization, and analysis to support data-driven business strategies.
- Developed expertise in data analysis and artificial intelligence by completing certifications in Basics of Exploratory Data Analysis, Python for Data Analysis, and Artificial Intelligence with Python through Great Learning.
- Strengthened technical proficiency with certifications in Introduction to R (Data Camp) and Python for Data Science (Alison), promoting effective data manipulation and analysis for diverse business needs.
- Finalized sustainability-focused courses, including Sustainability Challenges for the Planet and Employers, Foundational
  Sustainability Skills and Competencies, and careers in Sustainability through Coursera (Arizona State University), gaining
  a deep understanding of sustainability business practices and environmental challenges.

### **TECHNICAL SKILLS**

- Programming Language & Tools Proficient in Python, R, HTML, and software development tools (Arduino IDE, VS Code, SQL).
- Data Analysis & Visualization Skilled in Data Manipulation (Python, R) and Data Visualization (Power BI, Matplotlib).
- Artificial Intelligence & Machine Learning Experienced with Al/ML algorithms, including Supervised/Unsupervised Learning.
- Embedded Systems & IOT Expertise in Microprocessor (Intel), Microcontrollers (Arduino), and IOT technologies and protocols.